US Army Corps of Engineers®

R&D Program: TOWNS

Work Unit: Tools for Rapid Field Assessment During Floods

Needs & Problems Addressed:

- Difficult to obtain information from field personnel who are performing damage assessments and observing potential problem areas

Objectives:

- Develop hand-held Pocket PC based software and hardware for directly entering computer field data into a database
- Develop flexible data entry software and data transfer to GIS

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Work Unit Funding Profile:

FY03	FY04	FY05	Total
$ 70k	$120k	$ 0 k	$ 190k

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Business Program/Missions Areas Supported:

- Inland Navigation __ %
- Coastal Navigation __ %
- Coastal Storm Damage Reduction 10 %
- Inland Flood Control/Damage Reduction 10 %
- Environmental Protection & Quality __ %
- Multi-Purpose (Hydropower, Rec & Water Supply) __ %
- Emergency Management 80 %
- Regulatory __ %
- Support for Others 10 %

(Must to add to 100%) Total: 100 %

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CW Strategic Goals Check List: (check if applies)

- Provide sustainable water resources development & mgmt ___
- Restore past environment degradation ___
- Provide project services of high quality _X_
- Reduce losses from natural & manmade hazards _X_
- Supports being a world class technical leader _X_
- Addresses strategic or system needs in a framework or integrated approach by developing:
  - Methods or decision support tools _X_
  - Technology to improve life cycle productivity ___
  - Technology to monitor systems, provide feedback and develop operating guidance ___

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Which “short term” field needs does this support:

- Improves efficiencies in emergency management
- Expedites decision-making during floods
- Makes available critical technology to support rapid transmission of data

Field Review Group Relative Ranking:

- FRG planned for 21-22 AUG 02

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Listening Sessions Check List: (check if applies)

- Improves data sharing/exchange with the public in these areas:
  - Provides one stop shop for maps & data for basin wide planning ___
  - Provides data to make informed decisions _**X**_
  - Provides a system for basin wide planning ___ Provides information about what is happening at Corps facilities _**X**_ (up to date web sites)
- Tech Transfer plan to include educating the public _**X**_
- Coordinate research, models, analysis with regulatory agencies to insure results will be accepted _**X**_
- Develop R&D products:
  - For watershed management plans, not just at the project level ___
  - To include aesthetics as components of all projects ___
- Create better models for ground & surface water ___

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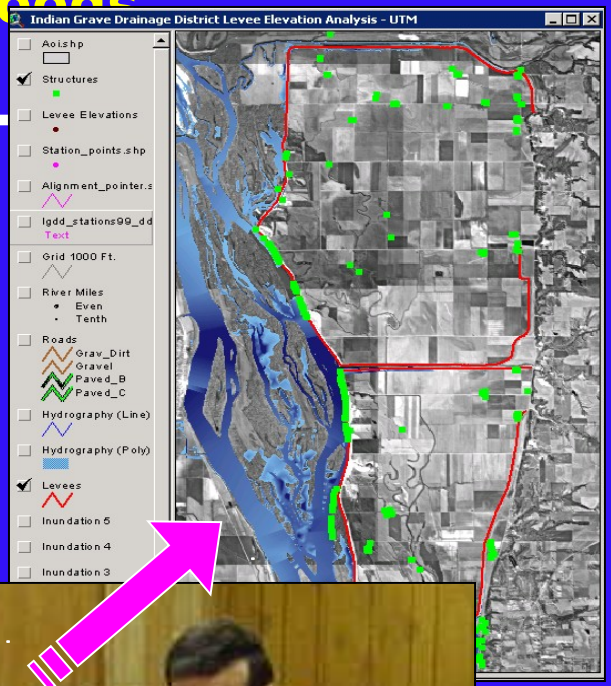
Products:

- Hand-held Pocket PC based software and hardware for rapid field data entry and transmission of data
- TN: use of rapid assessment tool system
- PROSPECT training on



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Benefits

- Direct:
  - Field data rapidly entered and stored in a central GIS system during flood emergencies
  - Higher ROI

- Indirect:
  - Minimize property and life losses
  - Improve efficiency in transferring and entering field data during emergency operations
  - Enhances emergency management capabilities

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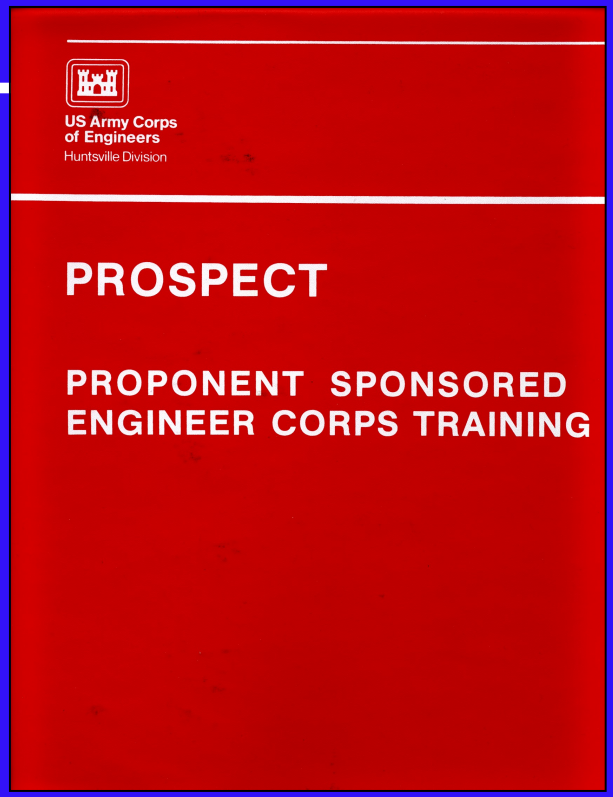
Technology Transfer Plan:

- Disseminate information via TOWNS website
- Present method at Corps Emergency Management conferences
- Incorporate in PROSPECT training



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Why should the Corps fund this R&D, instead of private industry and/or others:

- Products specifically aimed for Corps use and interface with Corps software unlikely to be developed by industry

What is Impact if not started:

- Inefficient data transfer can result in delayed maintenance that costs more or could lead to structural failure